Name of Work : - Developments works to be under taken in Ward No.05 of BBMP around Solid Waste Disposal Processing units Bellahalli, Bagaluru and Kattigenahalli Byatarayanapura Constituency

Name of Contractor :-Sir. A G Narayanaswamy

Estimated cost: 1250 lakhs

Amount put to Tender as per Sanction : 1047.05 Lakhs

Agreement No. EE(Project)/Ynk Zone/WO/Date:02/21-22, Dated:26.05.2021

Accepted Tendered Amount : Rs.1057.44 lakhs

Job Code / Indent No :- 005-20-000054 Indent No.4272/Call-2

Head of Account : P 3747 Under CM Nava Nagarothana Grants

Comparative Statement

Sl. No.	Description of work	Unit	As per Estimate			As per Tender			Total Antisipated Qty	Total Amount 14+17	Qty up to 125%			Qty above 125%			Total Amount 14+17	Excess Amount 11-09	Savings Amount 11-9	Remarks
			Qty	Rate	Amount	Qty	Rate	Amount			Qty	Rate	Amount	Qty	Rate	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18	19	20
1	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No-27,I No-5.33,KPWD SR 2018-19)	Sqm	14378.83	111.30	1600363.78	14378.83	106.04	1524731.13	983.10	104247.92	983.10	106.04	104247.92	0.00		0.00	104247.92		14,20,483.21	
2	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(I No-19.1, P No-144)	Cum	7572.12	220.40	1668895.25	7572.12	202.44	1532899.97	2306.71	466969.43	2306.71	202.44	466969.43	0.00		0.00	466969.43		10,65,950.54	
3	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. (P.No-27,I No-5.31.1, KPWD SR 2018-19), 7.5cms thick	Sqm	2396.47	742.00	1778180.74	2396.47	684.44	1640239.93	90.00	61599.60	90.00	684.44	61599.60	0.00		0.00	61599.60		15,78,640.33	
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)	Cum	67.20	5505.64	369979.01	67.20	5109.20	343338.24	249.27	1348189.69	84.00	5109.20	429172.80	165.27	5560.70	919016.89	1348189.69	10,04,851.45		
5	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)	Cum	165.12	7070.20	1167431.42	165.12	6940.80	1146064.90	543.10	3836922.15	206.40	6940.80	1432581.12	336.70	7140.90	2404341.03	3836922.15	26,90,857.25		
6	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification.(I No-28.8.2,P No-229)	MT	14.86	72316.38	1074621.41	14.86	67480.00	1002752.80	30.12	2188272.06	18.58	67480.00	1253778.40	11.54	80948.07	934493.66	2188272.06	11,85,519.26		
7	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge (Data Rate)	Sqm	384.00	5418.00	2080512.00	384.00	5152.58	1978590.72	87.87	452757.20	87.87	5152.58	452757.20	0.00		0.00	452757.20		15,25,833.52	
8	Providing and Fixing pre cast covering Slab 100mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge (Data Rate)	Sqm	1080.00	2337.00	2523960.00	1080.00	2125.62	2295669.60	1528.89	3290749.52	1350.00	2125.62	2869587.00	178.89	2354.31	421162.52	3290749.52	9,95,079.92		
9	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.3011,oading and unloading with 10km lead= (I No-19.14,P No-143,KPWD SR 2018-19)	Cum	14453.97	69.06	998191.17	14453.97	63.62	919561.57	19105.33	1223452.06	18067.46	63.62	1149451.81	1037.87	71.30	74000.25	1223452.06	3,03,890.49		

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No.	Description of work	Unit	As per Estimate			As per Tender			Total Anticipated Qty	Total Amount 14+17	Qty up to 125%			Qty above 125%			Total Amount 14+17	Excess Amount 11-09	Savings Amount 11-9	Remarks
			Qty	Rate	Amount	Qty	Rate	Amount			Qty	Rate	Amount	Qty	Rate	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18	19	20
10	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)	Cum	15186.93	2001.28	30393299.27	15186.93	2073.56	31491010.57	13503.74	28000820.89	13503.74	2073.56	28000820.89	0.00		0.00	28000820.89		34,90,189.68	
11	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6), issue rate dated 03-01-2020	Sqm	48179.90	28.62	1378908.74	48179.90	28.92	1393362.71	57237.28	1655302.06	57237.28	28.92	1655302.06	0.00		0.00	1655302.06	2,61,939.35		
12	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-158,I No-21.7), issue rate dated 03-01-2020	Sqm	88446.65	12.72	1125041.39	88446.65	13.50	1194029.78	114051.35	1537422.77	110558.31	13.50	1492537.19	3493.04	12.85	44885.58	1537422.77	3,43,392.99		
13	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. (P.No-158,I No-21.2,KPWD SR 2018-19)	Sqm	30944.45	5.30	164005.59	30944.45	5.78	178858.92	10780.04	62308.61	10780.04	5.78	62308.61	0.00		0.00	62308.61		1,16,550.31	
14	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6), issue rate dated 03-01-2020	Cum	2642.05	6597.44	17430766.35	2642.05	6835.72	18060314.03	2823.00	19297243.30	2823.00	6835.72	19297243.30	0.00		0.00	19297243.30	12,36,929.27		
15	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12), issue rate dated 03-01-2020	Cum	3351.42	7753.90	25986575.54	3351.42	8033.98	26925241.25	2303.12	18503244.22	2303.12	8033.98	18503244.22	0.00		0.00	18503244.22		84,21,997.03	
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)	Sqm	3571.30	454.74	1624012.96	3571.30	482.00	1721366.60	1772.70	854438.99	1772.70	482.00	854438.99	0.00		0.00	854438.99		8,66,927.61	
17	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials upto a lead of 1000 metrers, stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 (I No-18.47,P No-140)	Cum	2089.31	978.54	2044473.41	2089.31	915.80	1913390.10	968.08	886568.14	968.08	915.80	886568.14	0.00		0.00	886568.14		10,26,821.96	

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S.No.	Description of work	Unit	As per Estimate			As per Tender			Total Anticipated Qty	Total Amount 14+17	Qty up to 125%			Qty above 125%			Total Amount 14+17	Excess Amount 11-09	Savings Amount 11-9	Remarks
			Qty	Rate	Amount	Qty	Rate	Amount			Qty	Rate	Amount	Qty	Rate	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18	19	20
18	KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5, with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (P.No-174,1 No-22.1.1)	Cum	1253.59	3800.10	4763767.36	1253.59	3368.87	4223181.74	1016.51	3424475.68	1016.51	3368.87	3424475.68	0.00		0.00	3424475.68		7,08,706.06	
19	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,1 No-22.6.1)	Cum	1253.59	5210.96	6532407.35	1253.59	5000.00	6267950.00	1016.19	5080940.27	1016.19	5000.00	5080940.27	0.00		0.00	5080940.27		11,87,009.73	
													87478024.63			4797899.93	92275924.56	8022459.98	21499089.98	
					10,47,05,436.11			10,57,52,446.00		92275924.56										
	Total Amount in Rs.																			
	Extra Items																			
EIRL-1	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 (Page, 25 Item 5.26.2)	Sqm							208.32	206076.39				208.32	989.23	206076.39		206076.39	
EIRL-2	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications Specification No. KBS 4.1, 4.2 (Page, 13 Item 4.6)	Cum							11.39	66116.56				11.39	5804.79	66116.56		66116.56	
EIRL-3	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc ,complete (Page, 27 Item 5.30)	Nos							3351.00	1463716.80				3351.00	436.80	1463716.80		1463716.80	
EIRL-4	KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3	Sqm							62905.68	403854.50				62905.68	6.42	403854.50		403854.50	

Comparative Statement

No.	Description of work	Unit	As per Estimate			As per Tender			Total Anticipated Qty.	Total Amount 14+17	Qty up to 125%			Qty above 125%			Total Amount 14+17	Excess Amount 11-09	Savings Amount 11-9	Remarks
			Qty	Rate	Amount	Qty	Rate	Amount			Qty	Rate	Amount	Qty	Rate	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18	19	20
EIRL-5	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 (Page, 147 Item 19.60)	Cum							4525.94	1574801.56				4525.94	347.95	1574801.56		1574801.56		
EIRL-6	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method by rotavator at OMC,spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (Page, 153 Item 20.6)	Cum							4736.80	8874632.40				4736.80	1873.55	8874632.40		8874632.40		
										12589198.21						1,25,89,198.21		1,25,89,198.21	0.00	
	Total Rs.				**10,47,05,436.11**			**10,57,52,446.00**		**10,48,65,122.77**						**1,73,37,098.14**		**2,06,11,658.19**	**2,14,99,089.98**	
	Grand Total in Rs.				**52,35,271.81**					**1,25,83,814.73**										
	Tender Premium 5%				**1,25,64,652.33**					**9,72,951.16**										
	GST 12%									**24,65,000.00**										
	Additional GST 6%				**24,60,000.00**					**3,111.34**										
	DPR and PMC LS				**34,639.75**					**12,08,90,000.00**										
	Miscellaneous				**12,50,00,000.00**															
								Total Estimate Cost	**12,50,00,000.00**											
								Actual Work Done	**12,08,90,000.00**											
								Overall Savings	**41,10,000.00**											

TEJUS CONSULTANTS Consultant

Assistant Engineer
Project Division Yalahanka Zone
B.B.M.P

Assistant Executive Engineer
Project Division Yalahanka Zone
B.B.M.P

Executive Engineer
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